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Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application (it should be noted that claims cancelled are cancelled without prejudice):

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LISTING OF THE CLAIMS

Claim 1 (previously presented): A method for characterizing an electronic circuit comprising:

receiving design information from a circuit design tool;

identifying an electrical circuit condition including one or more of a noise event, a coupling event, a race event and a dynamic hazard;

determining a design verification test;

evaluating the effectiveness of the design verification test in exercising the electrical circuit condition; and

determining a second design verification test and also evaluating the effectiveness of the second design verification test in exercising the electrical circuit condition when the first design verification test does not effectively exercise the electrical circuit condition.

Claim 2 (original): The method of Claim 1 wherein determining a design verification test comprises:

generating a design verification test using one or more of a manual test definition process, an algorithmic test definition process, a random test definition process and an exhaustive test definition process.

Claim 3 (original): The method of Claim 1 wherein evaluating the effectiveness of the design verification test comprises:

executing the design verification test in a simulator; and recognizing the presence of the electrical circuit condition in the simulator results.

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Claim 4 (original): The method of Claim 1 wherein evaluating the effectiveness of the design verification test comprises:

representing the electrical condition in a simulator monitor function; executing the design verification test and the simulator monitor function in a simulator; and

monitoring the activity of the simulator monitor function.

Claim 5 (original): The method of Claim 1 wherein receiving design information comprises:

parsing an output report from a circuit design tool; and generating tokens representing the parsed output report.

Claim 6 (cancelled).

Claim 7 (original): The method of Claim 1 wherein identifying an electrical circuit condition comprises:

receiving tokens descriptive of the design information; and analyze the structure of the tokens in accordance with a pre-established electrical event definition.

Claim 8 (original): The method of Claim 1 wherein evaluating the effectiveness of the design verification test comprises:

generating a description file readable by one or more of an automatic test pattern generator, a fault simulator, and a vector tester; and causing one or more of an automatic test pattern generator, a fault simulator, and a vector tester to be executed using said generated description file as an input.

Claim 9 (original): The method of Claim 1 further comprising:

receiving the electrical circuit condition in a design verification tool; and

verifying the design of the electronic circuit based on the electrical circuit

condition.

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- Claim 10 (original): The method of Claim 9 wherein verifying the design comprises simulating one or more of a noise event, a coupling event, a timing event, a race event, and a dynamic hazard.
- Claim 11 (original): The method of Claim 9 wherein verifying the design comprises automatically generating a test pattern for testing one or more of a noise event, a coupling event, a timing event, a race event, and a dynamic hazard.
 - Claim 12 (previously presented): An apparatus for characterizing an electronic circuit comprising:

design information receiver capable of receiving design information; circuit condition identifier capable of identifying an electrical circuit condition including one or more of a noise event, a coupling event, a race event and a dynamic hazard in the design information that requires test;

design verification test selection unit capable of selecting a first design verification test; and

evaluation unit capable of evaluating the effectiveness of the first selected design verification test in exercising the identified circuit condition and wherein the design verification test selection unit is capable of selecting a second design verification test when the evaluation unit determines that the first selected design verification test is ineffective in exercising the identified circuit condition and wherein the evaluation unit is capable of evaluating the effectiveness of the second selected design verification test.

Claim 13 (original): The apparatus of Claim 12 wherein the design verification test selection unit comprises one or more of a manual test definition module, an automated test definition module, a random test definition module, and an exhaustive test definition module.

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Claim 14 (original): The apparatus of Claim 12 wherein the evaluation unit comprises:

executive module that conveys the design verification test to a simulator; and analyzer module that receives results from the simulator and issues a signal when the electrical circuit condition is recognized in said simulator results.

Claim 15 (original): The apparatus of Claim 12 wherein the evaluation unit comprises:

simulator monitor function receiver capable of receiving a simulator monitor function;

executive module that conveys the design verification test and the received simulator monitor function to a simulator; and analyzer module that issues a signal when the simulator monitor function is triggered.

Claim 16 (original): The apparatus of Claim 12 wherein the design information receiver comprises a lexical analyzer capable of generating tokens according to an output report received from a circuit design tool.

Claim 17 (cancelled).

- Claim 18 (original): The apparatus of Claim 12 wherein the circuit condition identifier comprises a parser capable of analyzing the structure of received tokens in accordance with a pre-established electrical event definition.
 - Claim 19 (original): The apparatus of Claim 12 wherein the evaluation unit comprises:

description file generator capable of generating a description file that is readable by one or more of an automatic test pattern generator, a fault simulator, and a vector tester; and

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test executive module capable of starting one or more of an automatic test pattern generator, a fault simulator, and a vector tester using said generated description file as an input.

Claim 20 (original): The apparatus of Claim 12 further comprising a design verification director capable of:

directing the received electrical condition to a design verification tool; starting a design verification tool;

receiving an output from the design verification tool; and

issuing a signal when the identified electrical circuit condition is not detected in the received design verification tool output.

Claim 21 (previously presented): A computer-readable medium having computerexecutable functions for characterizing an electronic circuit comprising:

receiving design information from a circuit design tool;

identifying an electrical circuit condition including one or more of a noise event, a coupling event, a race event and a dynamic hazard that requires test based on the design information;

determining a design verification test;

evaluating the effectiveness of the design verification test in exercising the electrical circuit condition; and

determining a second design verification test and also evaluating the effectiveness of the second design verification test in exercising the electrical circuit condition when the first design verification test does not effectively exercise the electrical circuit condition.

Claim 22 (original): The computer-readable medium of Claim 21 wherein determining a design verification test comprises:

generating a design verification test using one or more of a manual test definition process, an algorithmic test definition process, a random test definition process and an exhaustive test definition process.

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- Claim 23 (original): The computer-readable medium of Claim 21 wherein evaluating the effectiveness of the design verification test comprises:

 executing the design verification test in a simulator; and recognizing the presence of the electrical circuit condition in the simulator results.
- 5 Claim 24 (original): The computer-readable medium of Claim 21 wherein evaluating the effectiveness of the design verification test comprises:

 representing the electrical condition in a simulator monitor function,

 executing the design verification test and the simulator monitor function in a simulator; and

 monitoring the activity of the simulator monitor function.
 - Claim 25 (original): The computer-readable medium of Claim 21 wherein receiving design information comprises:

 parsing an output report from a circuit design tool; and generating tokens representing the parsed output report.
- 15 Claim 26 (cancelled).

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- Claim 27 (original): The computer-readable medium of Claim 21 wherein identifying an electrical circuit condition comprises:

 receiving tokens descriptive of the design information; and analyze the structure of the tokens in accordance with a pre-established electrical event definition.
- Claim 28 (original): The computer-readable medium of Claim 21 wherein evaluating the effectiveness of the design verification test comprises:

 generating a description file readable by one or more of an automatic test pattern generator, a fault simulator, and a vector tester; and causing one or more of an automatic test pattern generator, a fault simulator, and a vector tester to be executed using said generated description file as an input.

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Claim 29 (original): The computer-readable medium of Claim 21 further comprising:

receiving the electrical circuit condition in a design verification tool; and verifying the design of the electronic circuit based on the electrical circuit condition.

- Claim 30 (original): The computer-readable medium of Claim 29 wherein verifying the design comprises simulating one or more of a noise event, a coupling event, a timing event, a race event, and a dynamic hazard.
- Claim 31 (original): The computer-readable medium of Claim 29 wherein verifying the design comprises automatically generating a test pattern for testing one or more of a noise event, a coupling event, a timing event, a race event, and a dynamic hazard.
 - Claim 32 (previously presented): An apparatus for characterizing an electronic circuit comprising:
- means for receiving circuit design information;
 - means for identifying electrical circuit conditions including one or more of a noise event, a coupling event, a race event and a dynamic hazard that require test; means for selecting a first design verification test;
 - means for evaluating the effectiveness of the first design verification test in exercising the identified electrical circuit condition; and means for selecting a second design verification test when the first design

verification test is found to be ineffective.